2019 State Assessment Data Interpretation Workshops:

Dynamic Learning Maps

RIDE — Rhode Island Department of Education

Objectives

- Understand who takes the alternate assessments, including the eligibility criteria
- Understand the basics of the DLM alternate assessments, including learning maps and how they are used.
- Review the state assessment results for DLM
- Understand how to read the DLM Student Score Report, including how the test is scored
- How to use the DLM data, including using the Rhode Island Assessment Data Portal

Remember that **all assessment data** should be used in conjunction with other data sources – attendance, local achievement data, observations, progress towards IEP goals and objectives – when making decisions.

Who takes the DLM alternate assessments?

AN OVERVIEW OF THE ELIGIBILITY CRITERIA FOR THE ALTERNATE ASSESSMENTS

Who takes the alternate assessments?

- Students participate in state assessments in one of three ways:
    1. Without accommodations (or supports during testing)
    2. With accommodations (a student may have one or more supports during testing)
    3. Take the alternate assessments

- What taking the alternate assessment means for students:
    - That they would benefit from classroom learning and experiences that are reduced in complexity.
    - That the evidence collected by the IEP Team shows the student's current skills align with the essential elements (modified standards in ELA, math and science)
    - That they take state assessments that are most appropriate for capturing what the student knows and can do.

- There are about 950 students in Rhode Island who take the DLM alternate assessments.

THE THREE ELIGIBILITY CRITERIA

1. Student has a disability, or disabilities, that significantly impacts cognitive function and adaptive behavior.

2. As documented in the IEP, the student's present levels of academic achievement indicate their ability to make progress through the alternate achievement standards (EEs) and the short term objectives include skills and concepts reflected in the steps found in the alternate achievement standard (EEs) learning maps, and the annual academic goals are closely aligned to grade-level alternate achievement standards.

3. The student is unable to apply academic, life, and job skills in home, school, and community without intensive, frequent, and individualized instruction and supports in multiple settings.

CRITERIA 1: STUDENT HAS A SIGNIFICANT COGNITIVE DISABILITY

Student has a disability, or disabilities, that significantly impacts cognitive function and adaptive behavior.

In other words….

◦ The student has a disability or multiple disabilities that prevents them from participating in a meaningful way in the standard academic classes and coursework.

◦ The student's disability (or disabilities) causes dependence on others for many, and sometimes all, daily living needs, and the student is expected to require extensive ongoing support in adulthood.

WHAT IS COGNITIVE ABILITY?

WHAT IT IS: How the brain functions/processes events and surroundings and interacts with others and their environment

WHAT IT IS NOT: physical challenges such as feeding tubes, wheelchair use, visual or hearing impairments, ability (or inability) to use their body independently, medical challenges such as seizures, or degenerative diseases.

The role communication plays in determining cognitive ability:
- Students who cannot, won't, or don't have a robust communication system do not automatically qualify for the alternate assessment.
- Example: eye gaze; limited use of their body
- Consider the student's interactions with their surroundings and others, not just communication ability

CRITERIA 2: INSTRUCTION AND LEARNING GOALS

As documented in the IEP, the student's present levels of academic achievement indicate their ability to make progress through the alternate achievement standards (EEs) and the short term objectives include skills and concepts reflected in the steps found in the alternate achievement standard (EEs) learning maps, and the annual academic goals are closely aligned to grade-level alternate achievement standards.

In other words…

◦ The student has access to the Common Core State Standards and the Next Generation Science Standards through the Essential Elements (the standards tested on the DLM).

◦ The student is working on learning standards that have been substantially modified due to the severity of the disability (e.g., the Essential Elements that are part of the Dynamic Learning Maps alternate assessments).

◦ Life and job skills that are appropriate and challenging for this student are also included.

Criteria 3: Applying Skills in Multiple Settings

The student is unable to apply academic, life, and job skills in the home, school, and community without intensive, frequent, and individualized instruction and supports in multiple settings.

In other words…

◦ A student may learn academic or functional skills at school that they are not able to apply at home or vice versa.

◦ What the student needs in order to learn is extensive, repeated, and individualized instruction from teachers and other service providers.

◦ The types of materials needed in order for the student to learn are significantly customized for to the student.

◦ How the student demonstrates what they know and can do requires substantially different materials and supports, including those supports that help a student communicate.

WHAT ARE FUNCTIONAL SKILLS?

Definition of functional skills: Skills that allow the student to take care of themselves physically, mentally, and emotionally, including interpersonal skills. Functional academic skills are skills used in everyday life (examples are: reading signs, instructions, emergency numbers, etc. and knowing the contexts in which to utilize them.)

Evaluating functional skills:

- ◦ Holistic skill set, not looking for a discreet/checklist set of skills.
- ◦ Does not include any physical disabilities/limitations the student may have.

What do the DLM Alternate Assessments look like?

AN OVERVIEW OF THE TEST DESIGN

DLM: The Basics

Content areas: Students are tested at the same grade levels and content areas as general education students, with one exception. The PSAT10 is given at grade 10 for most students, however students who take the alternate assessment do not take a grade 10 DLM test.

- **ELA and Mathematics:** grades 3-8 and 11
- **Science:** grades 5, 8, and 11

Test Window: April 6 – May 24, 2020. DLM is a year-end, online assessment, administered in a one-on-one setting.

Standards: Aligned to the CCSS and NGSS through the Essential Elements (EEs).

Items: Five to ten test items are grouped together into "testlets". Each testlet measures one Essential Element at one complexity level.

Adaptive: The test will become more difficult, become easier, or remain at the same level of difficulty depending on the student's performance.

DLM: Important Concepts

Learning Map

◦ Contains the individual skills that students need to master an Essential Element (or standard). Each skill is linked to multiple other skills. Individual skills are not separate from one another but become the basis for more complex skills.

Nodes

◦ Each individual skill on the Learning Map is called a *Node.*

◦ Nodes are linked together to show possible ways a student can learn an Essential Element.

◦ Are designed to help teachers find access points to develop instructional plans.

Linkage Level

◦ Nodes are grouped to show the steps a student might take towards learning an essential element. There is a beginning (easiest) skill and then it increases in difficulty with the last skill being the most complex. Each step is called a linkage level.

◦ There are five linkage levels (skills) for each Essential Element.

Learning Map Model
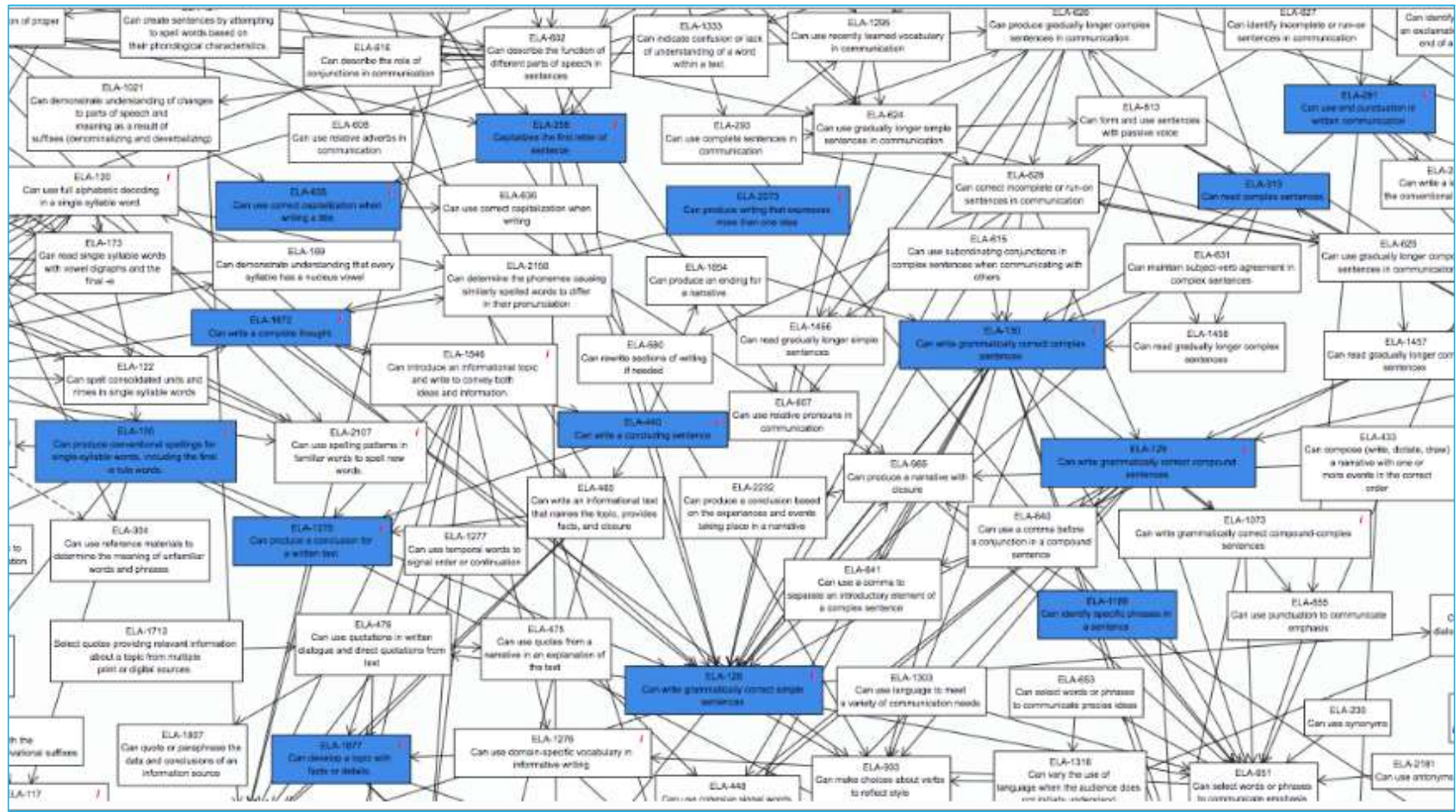
Anatomy of a Mini-Map (learning map)

1. Initial Precursor (IP)
(easiest skill)
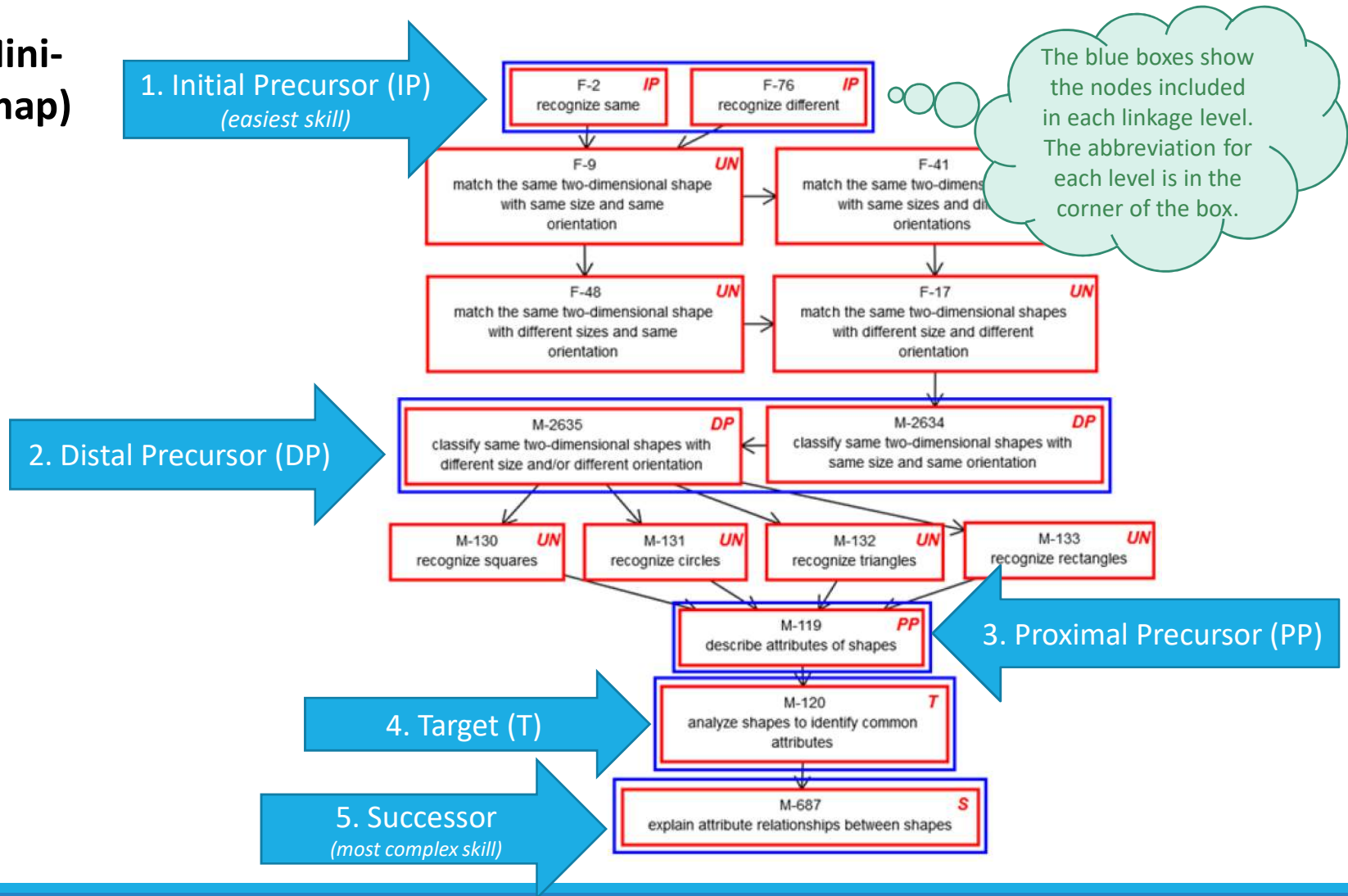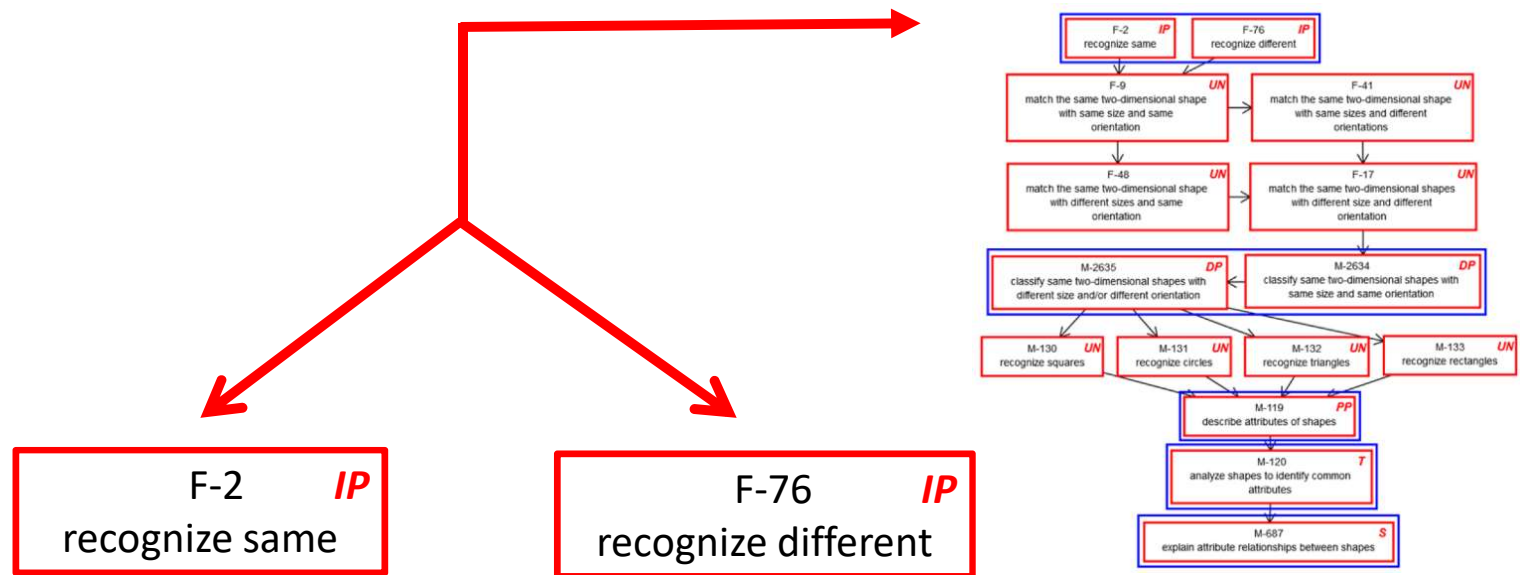
F-2 **IP** recognize same	F-76 **IP** recognize different

F-9 **UN** match the same two-dimensional shape with same size and same orientation

F-41 **UN** match the same two-dimens with same sizes and di orientations

F-48 **UN** match the same two-dimensional shape with different sizes and same orientation

F-17 **UN** match the same two-dimensional shapes with different size and different orientation

2. Distal Precursor (DP)

M-2635 **DP** classify same two-dimensional shapes with different size and/or different orientation

M-2634 **DP** classify same two-dimensional shapes with same size and same orientation

M-130 **UN** recognize squares

M-131 **UN** recognize circles

M-132 **UN** recognize triangles

M-133 **UN** recognize rectangles

M-119 **PP** describe attributes of shapes

3. Proximal Precursor (PP)

4. Target (T)

M-120 **T** analyze shapes to identify common attributes

5. Successor
(most complex skill)

M-687 **S** explain attribute relationships between shapes

> The blue boxes show the nodes included in each linkage level. The abbreviation for each level is in the corner of the box.

Mini-Map for Mathematics: **M.EE.5.G.1-4**. Mini-maps for all tested essential elements can be found at www.ride.ri.gov/dlm 15

Anatomy of a Mini-Map: Initial Precursor (IP)

F-2   *IP*
recognize same

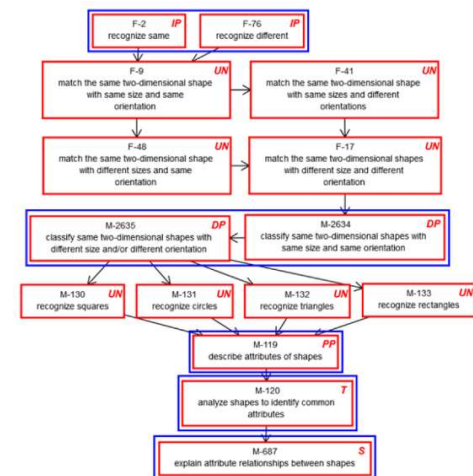| F-76   *IP* |
|---|
| recognize different |

Initial Precursor Nodes (IP)

Anatomy of a Mini-Map: Distal Precursor (DP)

Distal Precursor Nodes (DP)

M-2635 *DP*	M-2634 *DP*
Classify same two-dimensional shapes with different size and/or different orientation	Classify same two-dimensional shapes with same size and/or same orientation
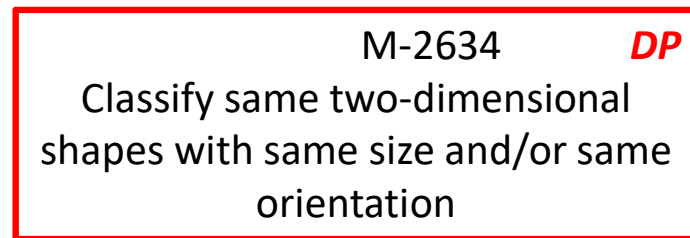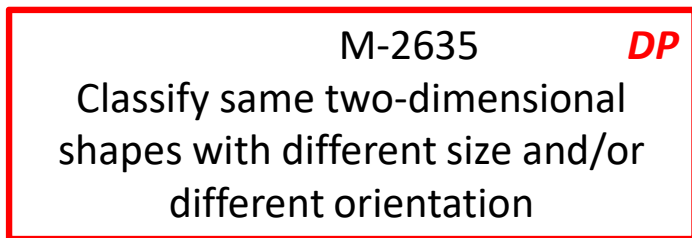
Anatomy of a Mini-Map: Proximal Precursor (PP)
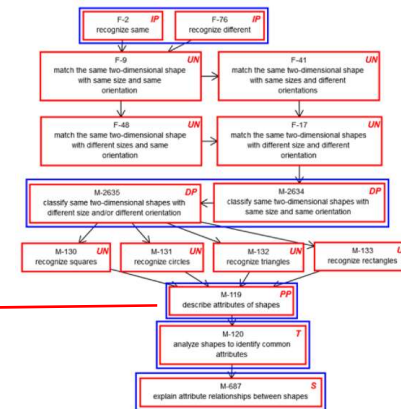
M-119   *PP*
describe attributes of shapes

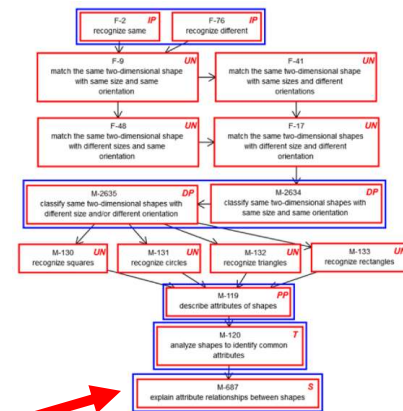**Proximal Precursor Nodes (PP)**

Anatomy of a Mini-Map: Target (T)
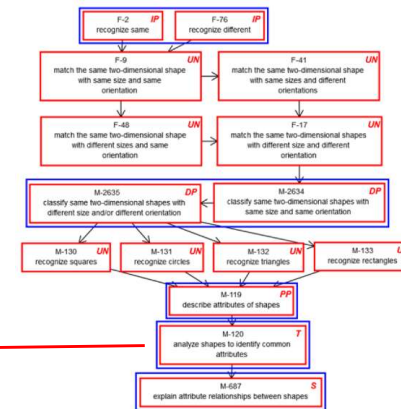
M – 120 **T**
analyze shapes to identify
common attributes

Target Node (T)

Anatomy of a Mini-Map: Successor (S)

M-687 *S*
Explain attribute relationships between shapes

Successor Node (S)

Anatomy of a Mini-Map: Untested (UN)
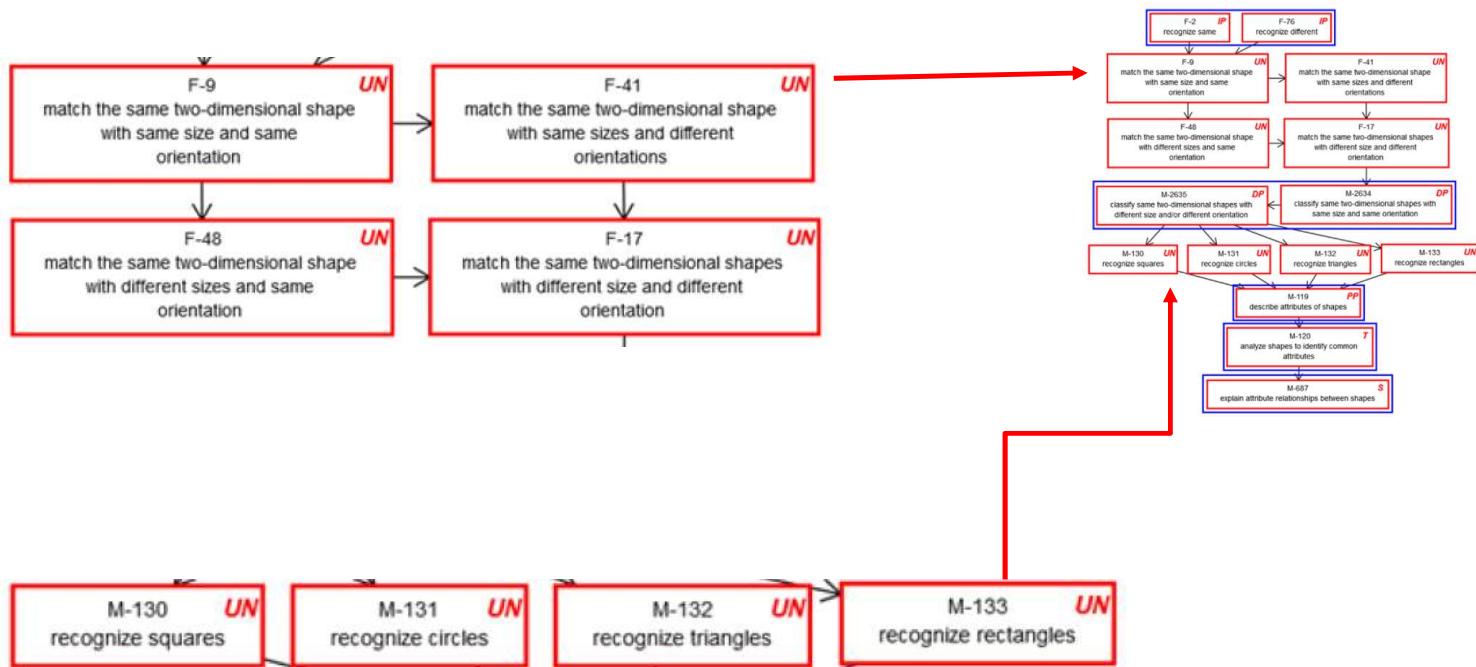
Untested Nodes (UN)

Putting it all together: What's on the test

	Number of Testlets	Number of Skills Tested
Initial Precursor	1	1
Distal Precursor	1	1
Proximal Precursor	1	1
Tested	1	1
Successor	1	1
TOTAL:	**5**	**5**
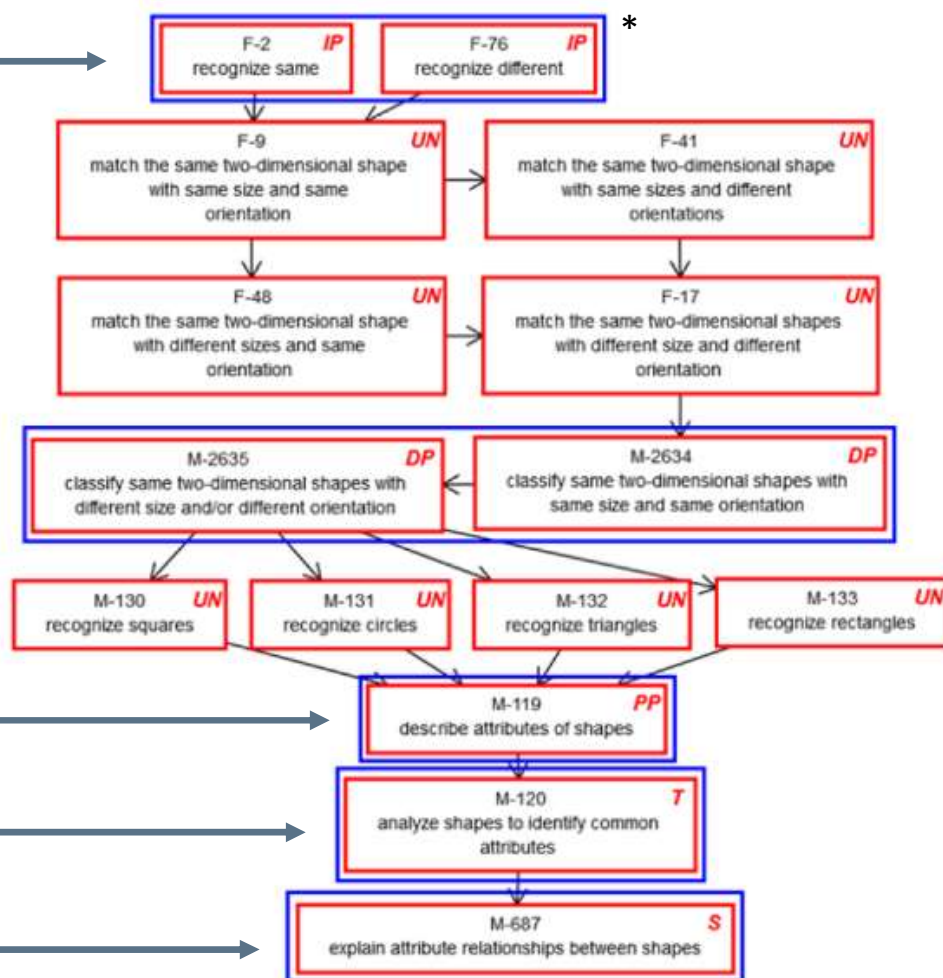
NOTE: A student would be tested on **ONE** linkage level, not all five. This means the student would take **ONE** testlet per essential element.

How many Essential Elements are tested on the DLM?

The table below shows the number of Essential Elements (standards) tested at each grade level.

Tested Grade	English Language Arts	Mathematics	Science
3	10	8	*Grade not tested*
4	11	8	*Grade not tested*
5	10	8	9
6	11	7	*Grade not tested*
7	13	7	*Grade not tested*
8	13	8	9
11	14	6	9

The 2019 Test Results for DLM

DLM Performance 2018 and 2019

	Number of Students	% Emerging	% Approaching Target	% At Target or Advanced
ELA				
2018	998	55%	22%	23%
2019	966	55%	21%	24%

Math				
2018	998	67%	22%	11%
2019	956	68%	20%	12%

Science				
2018	403	58%	26%	16%
2019	420	58%	27%	15%

DLM English Language Arts: Percent at each achievement level by subgroup (2019)
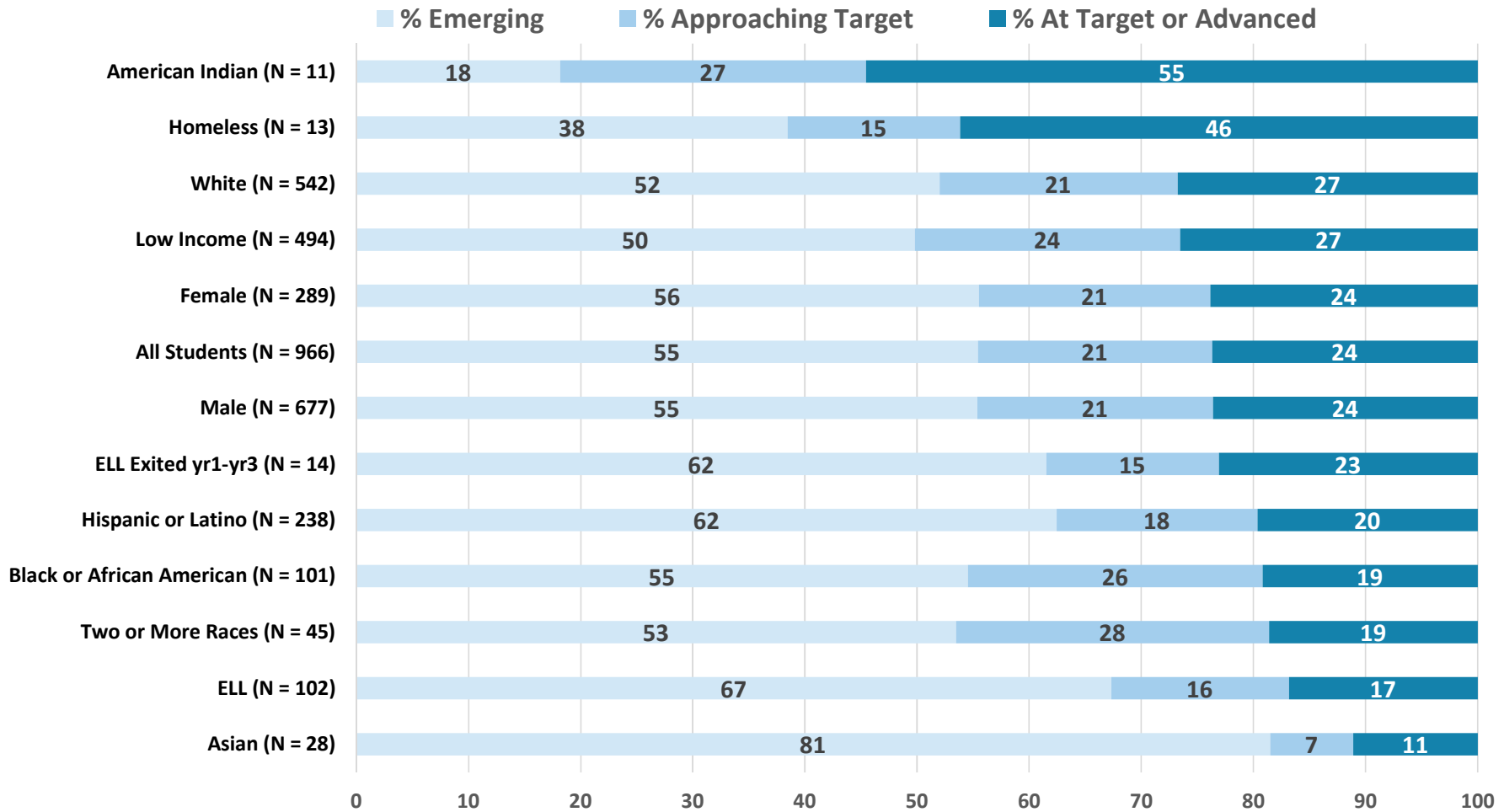
Legend: ■ % Emerging ■ % Approaching Target ■ % At Target or Advanced

Subgroup	% Emerging	% Approaching Target	% At Target or Advanced
American Indian (N = 11)	18	27	55
Homeless (N = 13)	38	15	46
White (N = 542)	52	21	27
Low Income (N = 494)	50	24	27
Female (N = 289)	56	21	24
All Students (N = 966)	55	21	24
Male (N = 677)	55	21	24
ELL Exited yr1-yr3 (N = 14)	62	15	23
Hispanic or Latino (N = 238)	62	18	20
Black or African American (N = 101)	55	26	19
Two or More Races (N = 45)	53	28	19
ELL (N = 102)	67	16	17
Asian (N = 28)	81	7	11

The following subgroup did not meet the reporting requirement of have ten or more students so results are not reported: Pacific Islander students.

DLM Mathematics. Percent of students at each achievement level by subgroup (2019)
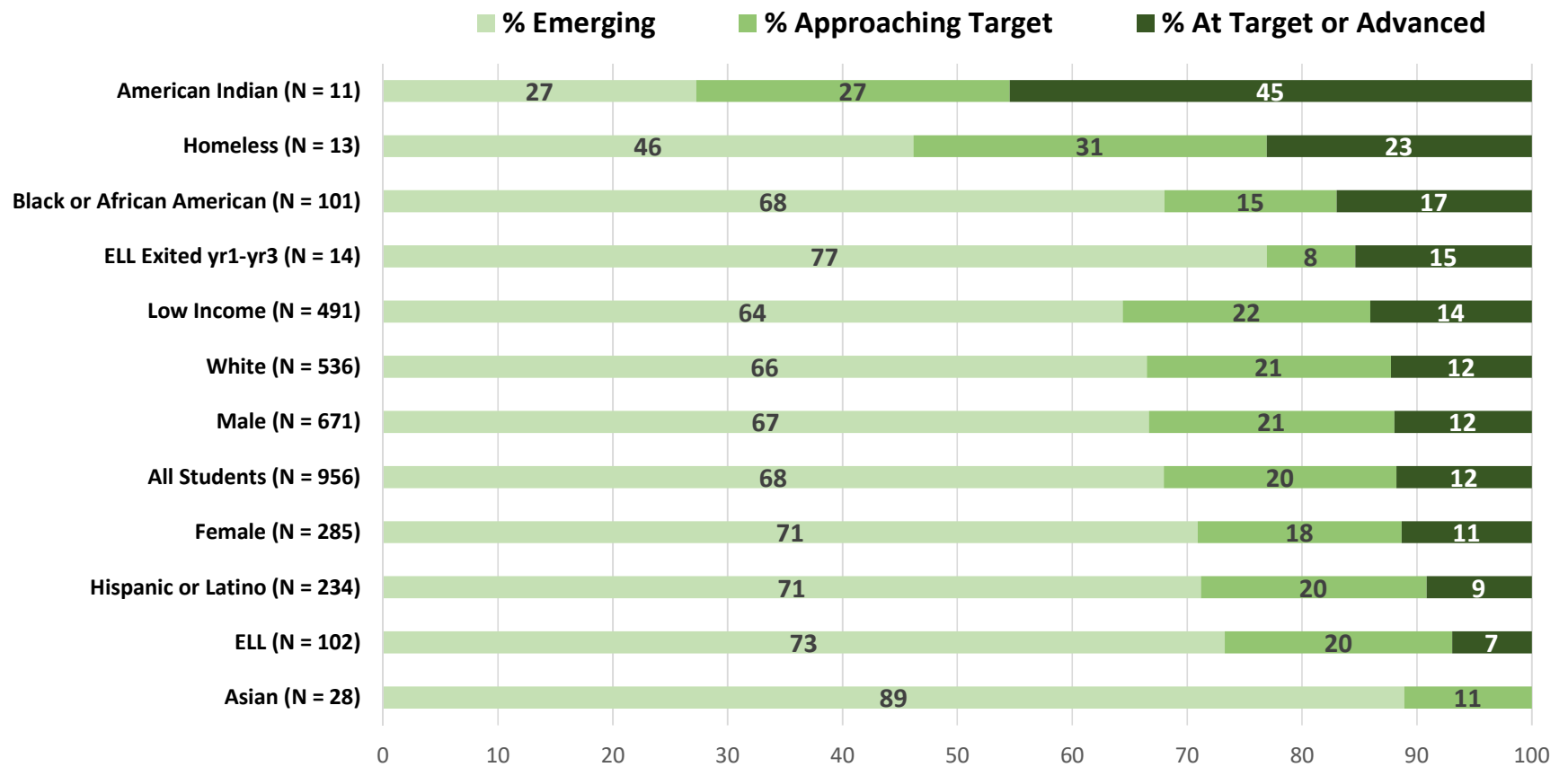
■ % Emerging ■ % Approaching Target ■ % At Target or Advanced

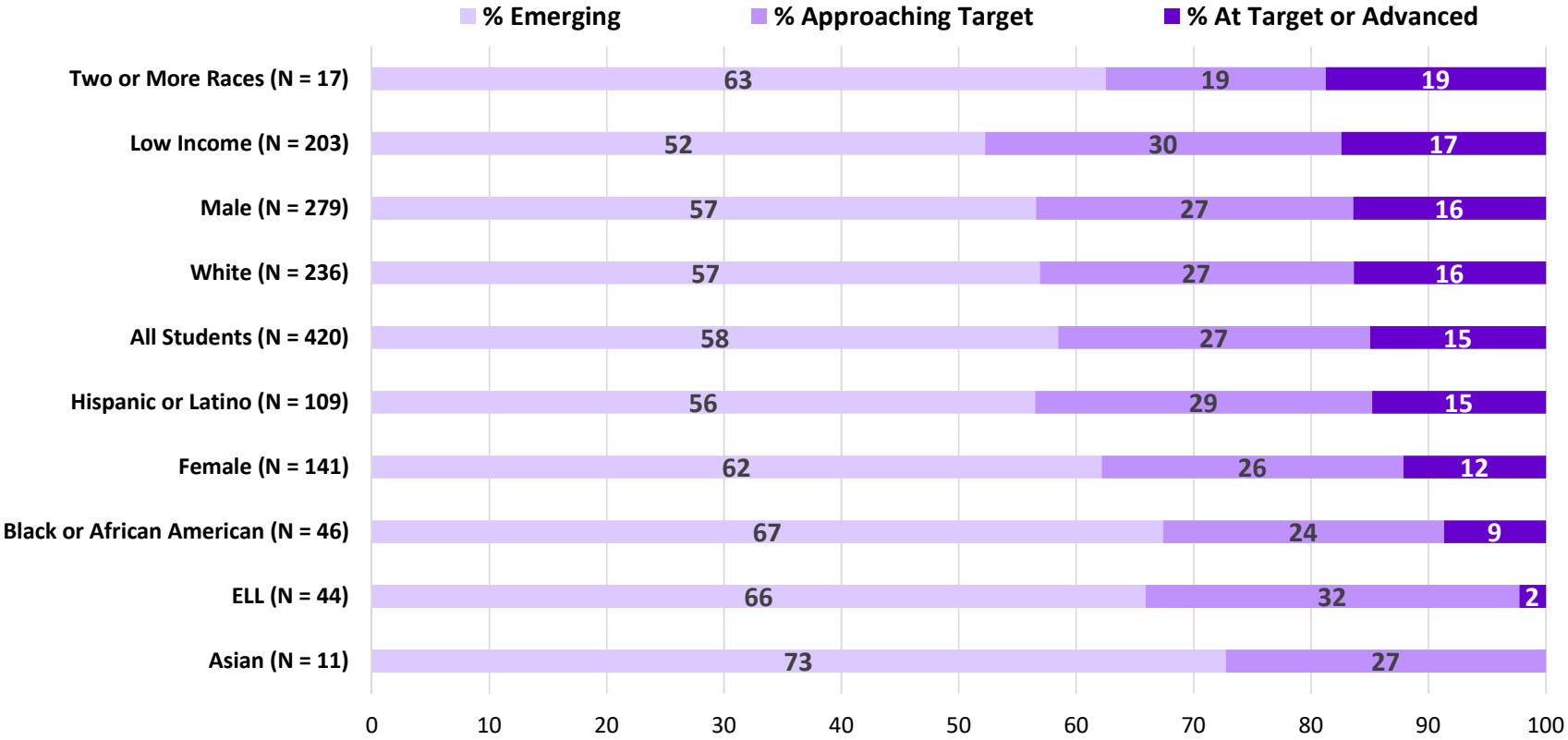| Subgroup	% Emerging	% Approaching Target	% At Target or Advanced
American Indian (N = 11)	27	27	45
Homeless (N = 13)	46	31	23
Black or African American (N = 101)	68	15	17
ELL Exited yr1-yr3 (N = 14)	77	8	15
Low Income (N = 491)	64	22	14
White (N = 536)	66	21	12
Male (N = 671)	67	21	12
All Students (N = 956)	68	20	12
Female (N = 285)	71	18	11
Hispanic or Latino (N = 234)	71	20	9
ELL (N = 102)	73	20	7
Asian (N = 28)	89	11	

The following subgroup did not meet the reporting requirement of have ten or more students so results are not reported: Pacific Islander students.

# DLM Science. Percent of students at each achievement level (2019).

Legend: ■ % Emerging   ■ % Approaching Target   ■ % At Target or Advanced

Subgroup	% Emerging	% Approaching Target	% At Target or Advanced
Two or More Races (N = 17)	63	19	19
Low Income (N = 203)	52	30	17
Male (N = 279)	57	27	16
White (N = 236)	57	27	16
All Students (N = 420)	58	27	15
Hispanic or Latino (N = 109)	56	29	15
Female (N = 141)	62	26	12
Black or African American (N = 46)	67	24	9
ELL (N = 44)	66	32	2
Asian (N = 11)	73	27	

DLM Student Score Report: Mathematics Example

Conceptual Area

Bar graphs summarize the percent of skills mastered by conceptual area. Not all students test on all skills due to availability of content at different levels per standard.

Calculate accurately and efficiently using simple arithmetic operations
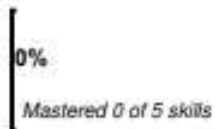
0%
Mastered 0 of 5 skills

Understand and use geometric properties of two- and three-dimensional shapes

20%
Mastered 1 of 5 skills

Understand and use measurement principles and units of measure

0%
Mastered 0 of 5 skills

Represent and interpret data displays

10%
Mastered 1 of 10 skills

Use operations and models to solve problems

0%
Mastered 0 of 10 skills

Understand patterns and functional thinking

20%
Mastered 2 of 10 skills

How the DLM is Scored:

Linkage Level	Number of Testlets	Skill	Scoring
Initial Precursor	1	1	1 skill
Distal Precursor	1	1	2 skills
Proximal Precursor	1	1	3 skills
Target	1	1	4 skills
Successor	1	1	5 skills

If a student mastered the proximal precursor testlet, they would get a score of 3 for the essential element that was tested.

Scoring

Calculate accurately and efficiently using simple arithmetic operations	0% Mastered 0 of 5 skills	Understand and use geometric properties of two- and three-dimensional shapes	20% Mastered 1 of 5 skills
Understand and use measurement principles and units of measure	0% Mastered 0 of 5 skills	Represent and interpret data displays	10% Mastered 1 of 10 skills
Use operations and models to solve problems	0% Mastered 0 of 10 skills	Understand patterns and functional thinking	20% Mastered 2 of 10 skills

Number of Essential Elements Tested:

1 - Calculate accurately and efficiently
1 - Understand and use measurement
2 - Use operations and models
1 - Understand and use geometric properties of two-and
   three-dimensional shapes
2 - Represent and interpret data displays
2 – Understand patters and functional thinking

9 TOTAL Essential Elements

Each Essential Element tested has five skills:

1. Initial Precursor

2. Distal Precursor

3. Proximal Precursor

4. Target

5. Successor

5 TOTAL SKILLS per Essential Element

9 x 5 = 45 skills

Score Report: Conceptual Areas

ELA

1. Construct understandings of text

2. Integrate ideas and information from text

3. Use writing to communicate

4. Integrate ideas and information in writing

MATH

1. Calculate accurately and efficiently using simple arithmetic operations

2. Understand and use measurement principals and units of measure

3. Use operations and models to solve problems

4. Understand and use geometric properties of two- and three-dimensional shapes

5. Represent and interpret data displays

6. Understand patterns and functional thinking.

SCIENCE

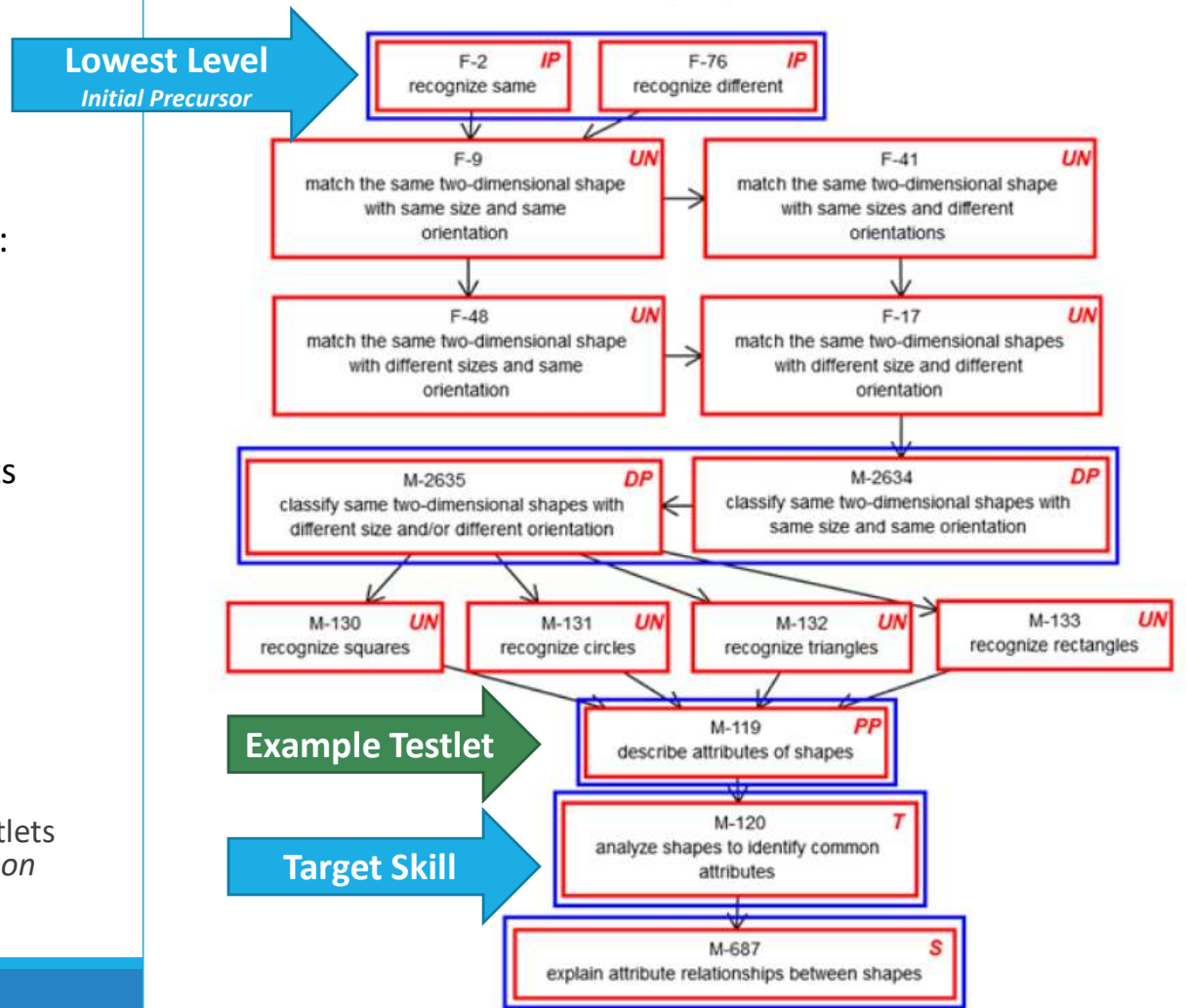1. Earth & Space Science

2. Life Science

3. Physical Science

Released Testlet Example

Released Testlet Example (Math 5.G.1-4.PP**):**
- This is not the testlet given to students but an example of the kind of testlet that a student would get at that linkage level.
- Each testlet assesses one linkage level, this testlet is an example of what students may experience when assessed at the Proximal Precursor linkage level.

NOTE: Directions for finding and using the released testlets and practice testlets: http://www.ride.ri.gov/dlm *(click on DLM Released Testlets and Practice Testlets tab)*

M.EE.5.G.1-4 Sort two-dimensional figures and identify the attributes (angles, number of sides, corners, color) they have in common

Lowest Level *Initial Precursor*

F-2 *IP* recognize same

F-76 *IP* recognize different

F-9 *UN* match the same two-dimensional shape with same size and same orientation

F-41 *UN* match the same two-dimensional shape with same sizes and different orientations

F-48 *UN* match the same two-dimensional shape with different sizes and same orientation

F-17 *UN* match the same two-dimensional shapes with different size and different orientation

M-2635 *DP* classify same two-dimensional shapes with different size and/or different orientation

M-2634 *DP* classify same two-dimensional shapes with same size and same orientation

M-130 *UN* recognize squares

M-131 *UN* recognize circles

M-132 *UN* recognize triangles

M-133 *UN* recognize rectangles

Example Testlet

M-119 *PP* describe attributes of shapes

Target Skill

M-120 *T* analyze shapes to identify common attributes

M-687 *S* explain attribute relationships between shapes

Released Testlet

Math.5.G.1-4.PP

Subject: Mathematics

Grade: 5

Linkage Level: Proximal Precursor

Essential Element: Sort two-dimensional figures and identify the attributes (angles, number of sides, corners, color) they have in common.

Node Assessed: Describe attributes of shapes.

Math.5.G.1-4.PP

Choose BEGIN to start.

⊕ GO BACK   BEGIN ⊕

NOTE: DLM has many accommodations that can adjust how the test is given and the way in which a student responds to the test questions. Even though this testlet is designed to be given on a computer, a student may requires the test be given on paper, or use objects instead, in order for them to be able to show what they know and can do.

Bob draws shapes on the chalkboard. Some shapes are the same size. Some shapes are different sizes.

BACK⬅

EXIT
DOES
NOT
SAVE

NEXT➡

Bob draws a shape.

Which answer describes this shape?

curved edge

straight line

right angle

BACK⬅

EXIT
DOES
NOT
SAVE

NEXT➡

Bob draws a rectangle.

Which answer describes this shape?

- 4 sides of equal length
- 4 right angles
- 6 faces of equal area

EXIT
DOES
NOT
SAVE

Bob draws another shape.

Which answer describes this shape?

3 right angles

3 sides

4 sides of the same length

Bob draws another shape.

Which answer describes this shape?

4 sides of same length

4 sides of different lengths

4 curved edges

BACK⬅

EXIT
DOES
NOT
SAVE

NEXT➡

39

Review: Math.5.G.1-4.PP

Are you done?

Red boxes ☐ mean you are not done. Ask your teacher for help.

Blue dots ⦿ mean you are done. You can choose end.

1	2	3	4
⦿	⦿	⦿	⦿

⦿ Answered ☐ Not answered

⦵ GO BACK

END ⦵

Using DLM Data

Resources and the Rhode Island Assessment Data Portal

How can we use this data?

Using DLM Scores

What other data and resources can we use with DLM?

How can we use this data?

DLM data is useful for:
◦ Analyzing overall state, district, and school performance.
◦ Indicating areas of strength and areas for growth at the student, school, and district level
◦ Measuring individual student performance on conceptual areas.
◦ Measuring progress towards IEP goals.

Cautions to keep in mind:
◦ DLM data should be used in conjunction with other data, such as progress towards achieving goals and objectives as outlined in their IEP. This will provide a more complete picture of the student's progress in all areas.
◦ DLM focuses on the student's level of mastery in each conceptual area, not number of test items correct.
◦ When using the ADP, some student data may not be available on the public site because there are fewer than 10 students in group.
◦ The DLM is not an "exit" test. If a student does well on the DLM and has achieved *Target* or *Above Target*, that *does not* mean they no longer qualify for the alternate assessment or that the assessment is no longer appropriate for the student.

Some questions to help districts and schools use the DLM data

Using the RI-ADP:

- How many students are at each achievement level in Elementary, Middle, and High school levels in your district?

- What is the percent of students at each achievement level in districts similar to yours?

- How did students who are outplaced (in your LEA's 190 school) do compared to students within your district schools?

Using Score Reports:

- Which Conceptual Areas are consistently low in each content area? In Elementary, Middle, and High School?

Using DLM Scores

Achievement Levels

- Best measure of whether students met expectations for their grade level
- Useful to evaluate individual student, subgroup, school, district, and state performance
- Best statistic: percent of students at each performance level

Percent of Skills Mastered by Conceptual Area:

- Most useful to identify where a student may need more instruction

DLM Resources

RIDE Assessment Results: www.ride.ri.gov/Assessment-Results

(includes link to the RI Assessment Data Portal, this webinar, Individual Student Report shells, parent interpretation guide in English and Spanish)

Practice Testlets for DLM *and* lists of Essential Elements tested on the DLM: www.ride.ri.gov/dlm or https://dynamiclearningmaps.org/erp_ye

RIDE Resources for Families: www.ride.ri.gov/Families

RI Assessment Data Portal:

- **Public**: https://lms.backpack.education/public/ride

- **Confidential:** http://ridemap.ride.ri.gov *Only accessible to district and school personnel who have accounts.*

- **September 2019 Test Coordinator Webinar:** (www.ride.ri.gov/tc) information about accessing the RI-ADP

How to explain data to families

Individual Student Reports
◦ Go through full score report
◦ Include details from curriculum (e.g., how covering topics/skills, how plan to address areas for growth)

School and District Data
◦ What you learned from analyzing data: what you found are areas of strength and areas for growth

RIDE's "Resources for Families" page: www.ride.ri.gov/Families
◦ FAQs about content standards and assessments
◦ Guidance and flyers explaining assessment concepts
◦ Report shells in various languages for all assessments